

# Scan Trip on *Traffic Incident Response*

April 2005

England  
Germany  
Netherlands  
Sweden

Sponsors:  
FHWA, AASHTO, NCHRP



# *Scan Trip Concept*

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- Convene a team of experts
- Send team to selected countries
- Identify technologies/practices that might have immediate or near-term implementation value in the U.S.



# *Traffic Incident Response - Why is it Important?*

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- 50-60% of congestion is non-recurring events
- Half of these events are from crashes, spilled loads, and disabled vehicles
- 14-18% of all crashes result from other incidents
- Incident management is receiving greater attention
  - *National Traffic Incident Management Coalition*
- Improving response effectiveness benefits safety and mobility



# *TIR Scan Trip*

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- Traffic Incident Response (TIR)
- Major issues of interest
  - *Pre-incident planning*
  - *Organizational response and on-scene operations*
  - *Incident responder and activity coordination*
  - *Tools, systems, and communication technologies*
  - *Incident response resource management and administration*
- Trip objective
  - *Examine programs and practices that provide coordinated response to traffic incidents*

# *TIR Team*

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David Helman, Mike Zezeski, Ron Moore*

Representing: FHWA, state DOT, fire, police,  
medical, trucking, and research perspectives



# Locations Visited

- Countries & cities

- *England*

- Birmingham

- *Germany*

- Ahrweiler, Cologne, Bergisch-Gladbach

- *The Netherlands*

- Delft, Arnhem

- *Sweden*

- Stockholm

*Two weeks in April 2005*



# *TIR Trip Implementation*

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- Team member presentations
  - *Wide range of meetings and audiences*
- Summary report
  - *Submitted June 1*
- Final report
  - *Publication in late 2005*
- Scan Technology Implementation Plan (STIP)
  - *Coordinated with NTIMC*



# *Observations about Incident Response Practices*

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- Countries geographically compact – higher population densities
  - *Practical to implement and operate national traffic management/information centers*
  - *Countries less complex institutionally, lesser amounts of overlapping authority*
  - *Difficult to compare national practices in Europe to national practices in the U.S.*
- Generally a national leader for coordinating incident response efforts



## *Observations about Incident Response Practices (Continued)*

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- Service patrols provide traffic control and motorist assistance to drivers and responders
- Clear jurisdictional responsibility for the police authority responding to incidents

## *Observations about Incident Response Practices (Continued)*

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- Fire departments had significant resources and training relative to incident response efforts
- Medical response is typically coordinated with the fire department response
  - *Medical response might include dispatching of a doctor to scene*

# *Observations about Incident Response Practices (Continued)*

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- **National auto clubs provide roadside repair or towing services to members**
  - *Many drivers belong to an auto club*
  - *Auto club responders often able to provide roadside vehicle repairs*
  - *Auto club response vehicles often have towing capability*
- **Recovery companies often contracted for incident response**
  - *Required to meet minimum qualifications*
  - *Required to meet response time criteria to maintain their contract*

# *Programs and Institutional Issues*

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- Recommendations on:
  - *National incident response policy*
  - *On-scene working relationship of incident responders*
  - *Performance measures*
  - *Training*
  - *Auto clubs*

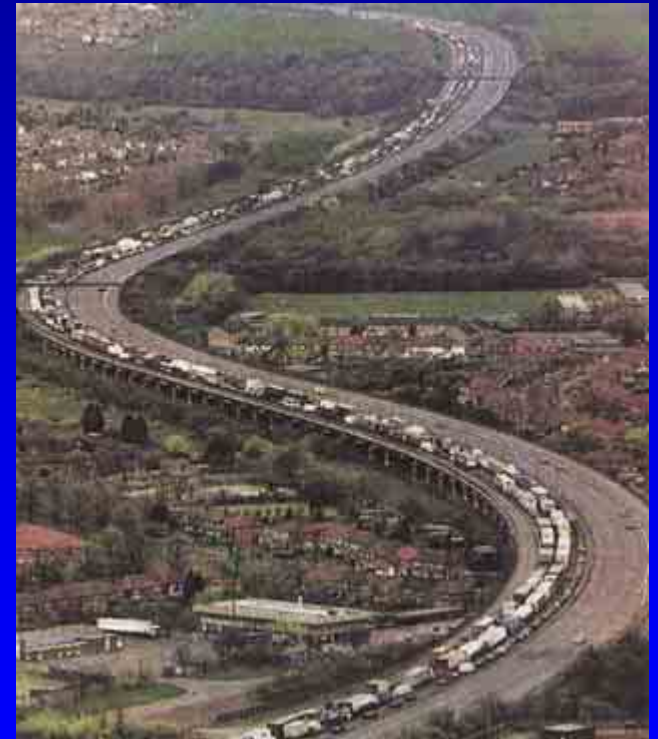


# *Netherlands Safety Priority*

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Netherlands priority for handling incidents:

- 1. Worker safety*
- 2. Traffic safety*
- 3. Assistance to victims*
- 4. Maintaining flow*
- 5. Salvaging cargo/vehicle*





## *Relationship of Incident Responders*

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- Incident response agencies should adopt formal agreements between response agencies that are:
  - *Incorporated into day-to-day operations*
  - *Integrated into training programs and included in regular rehearsals for incident response scenarios*
  - *The subject of ongoing joint planning*
  - *Addressed as part of the debriefing activities of individual incidents*

# Partnerships in England

Regional Control Center



Police



Partnerships



Traffic Officer



Incident Support Unit

## *Performance Measures*

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- **Develop guidance on performance measures:**
  - *Can be used by local and regional stakeholders to assess programs*
  - *Accounts for regional variations*
  - *Establishes basic minimum criteria*
  - *Funding to support meeting criteria*

## *Training*

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- All incident responders should receive training in incident safety and first aid
- Stakeholders should conduct regular and coordinated training
  - *Apply across agencies and jurisdictions*
- Integrate road incidents into training for all responders
- Develop certification and accreditation to improve accountability

# *Auto Clubs*

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- Identify ways that auto clubs can contribute to quick clearance of incidents





# Auto Club Assistance

- Auto clubs play important role
  - *Repair gear*
  - *Computer diagnostics*



# *Safety of Responders and Users*

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- **Develop national guidelines on:**

- *High visibility garments*
- *Buffer zones*
- *Response vehicle positioning*
- *Vehicle lighting and marking*





# Vehicle Livery



# *Neat Stuff*

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- Team saw several interesting or potentially useful practices
- These practices are not a part of the team's recommendations





# *Swedish Road Administration Service Patrol Vehicle*

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- Rear seat to accommodate passengers
- Truck mounted attenuator
- Small crane
- Real-time video camera







# *Motorcycle Use*

- Dutch roadside assistance (auto club)
- Sweden looking at motorcycle with foldable car trailer





# Portable Lighting

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- **Powermoon**
  - *Portable lighting unit*
  - *Provide scene lighting*
  - *Reduces the glare for approaching vehicles*
  - ([www.powermoon.de](http://www.powermoon.de))



# Automated Enforcement

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- Automated enforcement widely used
  - *Red light running cameras*
  - *Speed cameras*



# Fire Response Equipment

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- **Firexpress**

- *Uses small water droplets combined with foam*
- *Low pressure, portable, minimal water*
- *Safe for humans*



- **Guidance for locating cutting points on vehicles for extraction equipment**

- *Software - specific to individual vehicle designs*
- *Addresses: airbag gas cartridges, airbag sensors, belt pretensioners, batteries in hybrids, electrical hazards, strengthened materials, etc.*





# Training

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- Virtual reality (augmented reality) training used in Netherlands
  - *Provides realistic scenarios*
  - *Coordinates all types of responders*



# *Thank You*

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